



In the primary grades, the focus in mathematics is on learning about numbers, solving problems, studying two- and three-dimensional shapes, and getting information from graphs. All of these learning activities that you can expect your child to be involved in might be individualized for your child. This allows the skills to be taught, practiced, and learned so that your child can make progress more easily. Here is a mathematics example that shows how individualization might work.





A teacher begins teaching graphing by talking about things that students are familiar with, such

3rd Grade

- Learning about numbers by rounding to the ones, tens, and hundreds places
- Using addition, subtraction, and multiplication to solve problems
- Using objects to model multiplication and division situations
- Learning about the different parts of fractions, such as denominators and numerators
- Working with shapes by identifying their characteristics (e.g., number of sides and degrees of angles)
- Using measurement to find the volume of liquids, determine perimeter and area, tell time, and use money
- Giving and getting information using picture graphs, bar graphs, and line graphs

4th Grade Preview

- Learning about numbers by rounding to any place (i.e., ones, tens, hundreds, thousands), and reading, writing, and comparing decimals to tenths or hundredths
- Using addition, subtraction, multiplication, and division to solve problems with whole numbers
- Adding and subtracting fractions with denominators that are the same (e.g., 1/4 + 3/4)
- Working with shapes by identifying and classifying them using angles and their names (e.g., right angles) and lines (e.g., parallel and perpendicular lines)
- Using measurement to solve problems involving mass of objects, determining length, , using formulas to calculate area and perimeter of rectangles, and converting measurements (e.g., 2 feet = 24 inches)
- Making, describing, and extending patterns
- Collecting, organizing, and explaining data in picture graphs, line graphs, and bar graphs

as pets. The teacher shows them how to group pets into categories such as dogs, cats, birds, fish, and others. Then the teacher has the students sort pets into those same categories. Some students might sort pictures; others might sort miniature toy animals. Next, the teacher shows how to place the pet representations on a grid to make a graph. When is it time for the students to practice graphing, some students might use a grid with one inch squares and color the boxes or cells, others might use a larger grid and draw animals in the boxes or cells, others might glue pictures onto the grid, and still others might place the miniature toy animals on the grid. Then the teacher would talk about different things the graph shows them about pets. The students then describe something they know about pets based on the information shown in the graphs they created.

Mathematics Sample Instruction





In the primary grades, the focus of your child's instruction is on learning to read (e.g., matching letters and sounds to read words and recognizing sight words) and learning from, and enjoying reading or listening to text read aloud. Your child will:

- read/listen to stories (e.g., Alice's Adventures in Wonderland), poems, plays and informational texts (e.g., science, geography, history, directions, etc.) that may be adapted,
- produce different types of writing: stories, informational, and persuasive, and
- learn communication skills (e.g., class discussions and presentations).

The complexity of the stories and informational text your child will read or listen to will increase throughout the year and as he or she moves to the next grade. Following are examples of how

RANGE OF TEXT COMPLEXITY

- Text is short with many pictures.
- Sentences are simple and include repeated ideas.
- Text has events in order with ideas clearly stated.
- Charts and diagrams are simple.
- Text includes every day, common words.



- Text is detailed with few pictures.
- Sentences are compound and complex.
- Text has implied ideas and connections among a range of ideas.
- Charts and diagrams include detailed information.
- Text includes expressions and phrases.

the stories and text become more complex.

Instructional activities should be individualized for your child as needed. For example, to help students find details and examples that help them make inferences, the teacher reads a passage from a familiar story. After reading and listening, the teacher states an inference (e.g., Digger chewed up the shoe) and asks which details from the story suggests that is what happened. The teacher reads the passage, sentence by sentence, with some students and has the students highlight the details that support the inference. For some students, the teacher provides phrases from the passage paired with pictures (e.g., "Digger hid in the corner" and a picture of a dog in a corner) for the students to choose the details.

Teachers often pair reading and writing together. The teacher reads parts of the story again, discussing the descriptive words (e.g., gigantic, bumpy) and transition words (e.g., because, then) found in the story. The teacher presents a picture, such as a dog and a cat looking at each other, and tells students to write a story to go with the picture. The teacher instructs students to use descriptive and transition words. Some students may use a software program that includes words and pictures to choose as they write the story. Some students may complete





sentence starters (e.g., The dog looked at the cat. The cat______.) using words provided by the teacher to finish the sentence (e.g., purred, ran away, licked the dog, hissed).

ELA Sample Instructional Activities (text complexity increases in each grade)

4th Grade

- Reading new multi-syllable words using foundational skills (e.g., phonics, sight words, and word relationships)
- Learning new words and their meaning from 4th grade stories or informational texts
- Finding details and examples that help make inferences and understand important ideas in stories or informational texts
- Comparing and contrasting the point of view in two different stories
- Comparing and contrasting how the same event can be told differently in separate informational texts
- Using text features (e.g., heading, glossary, photographs) to help find information
- Sharing ideas and information by producing opinion pieces, informational pieces, and stories using precise language and a variety of transitional words (e.g., because)
- Communicating with classmates in discussions

- Learning the meaning of new words and multiple meaning words (e.g., mold), from reading 5th grade stories or informational texts
- Identifying the theme and finding details and examples to understand important ideas in stories or informational texts and that support inferences and conclusions
- Comparing and contrasting characters, setting, events in a story
- Comparing and contrasting information in two texts (e.g., two articles about turtles)
- Summarizing a story or informational text including the important ideas and details
- Understanding how authors use their point of view to describe things and to provide evidence to support the point of view
- Understanding and using information presented visually, orally or in charts, graphs, diagrams, timelines, etc.
- Sharing ideas and information by producing opinion pieces using words to link reasons to the opinion, informational pieces using multiple sources of information, and stories using dialogue between characters
- Communicating with classmates in discussions and making presentations





In the primary grades, the focus in mathematics is on learning about numbers, solving problems, studying two- and three-dimensional shapes, and getting information from graphs. All of these learning activities that you can expect your child to be involved in might be individualized for your child. This allows the skills to be taught, practiced, and learned so that your child can make progress more easily. Here is a mathematics example that shows how individualization might work.

The teacher gives the students a shape sorting activity using angles that are acute, right, and obtuse. Students are given cut out shapes with the angle to measure specified. Students sort the shapes by whether the angles they measured are acute, right, or obtuse. Some students may sort shapes with angles using the full degree ranges of acute and obtuse angles; some students may sort shapes with angles that are more clearly acute or obtuse (e.g., acute angles of less than 45 degrees and obtuse angles of more than 135 degrees). Some students may sort angles that are acute, right and obtuse; some students may sort either acute or obtuse and right angles.





4th Grade

- Learning about numbers by rounding to any place (i.e., ones, tens, hundreds, thousands), and reading, writing, and comparing decimals to tenths or hundredths
- Using addition, subtraction, multiplication, and division to solve problems with whole numbers
- Adding and subtracting fractions with denominators that are the same (e.g., 1/4 + 3/4)
- Working with shapes by identifying and classifying them using angles and their names (e.g., right angles) and lines (e.g., parallel and perpendicular lines)
- Using measurement to solve problems involving mass of objects, determining length, , using formulas to calculate area and perimeter of rectangles, and converting measurements (e.g., 2 feet = 24 inches)
- Making, describing, and extending patterns
- Collecting, organizing, and explaining data in picture graphs, line graphs, and bar graphs

5th Grade Preview

- Determining place value to the thousandths, using decimals to the thousandths
- Writing numerical expressions involving only whole numbers and one or more operational symbols
- Using addition, subtraction, multiplication, and division to solve problems
- Adding, subtracting, multiplying, and dividing fractions
- Solve 1-step problems using decimals
- Identifying properties of shapes (e.g., parallel perpendicular lines)
- Graphing points on grids and finding points on x- and y- axes; comparing information in graphs
- Calculating volume of 3-dimensional rectangular shapes; converting measurements (e.g., 3 feet = 1 yard)
- Making and describing number patterns
- Determining if multiplying by a number will increase or decrease the answer
- Organizing and describing data and data patterns using bar graphs, picture graphs, and line plots

Mathematics Sample Instructional Activities





By grade 5, the focus of your child's instruction is on learning from and enjoying reading or listening to text, while still providing instruction on learning to read (e.g., matching letters and sounds to read words and recognizing sight words). Your child will:

- read/listen to stories (e.g., The Black Stallion), poems, plays, and informational texts (e.g., science, geography, history, directions, etc.) that may be adapted,
- produce different types of writing: stories, informational, and persuasive, and
- learn communication skills (e.g., class discussions and presentations).

The complexity of the stories and informational text your child will read or listen to will increase throughout the year and as he/she moves to the next grade. The following are a few ways that

RANGE OF TEXT COMPLEXITY

- Text is short with many pictures.
- Sentences are simple and include repeated ideas.
- Text has events in order with ideas clearly stated.
- Charts and diagrams are simple.
- Text includes every day, common words.



- Text is detailed with few pictures.
- Sentences are compound and complex.
- Text has implied ideas and connections among a range of ideas.
- Charts and diagrams include detailed information
- Text includes expressions and phrases.

stories and text become more complex.

Instructional activities should be individualized for your child as needed. For example, to teach students how to compare characters, settings, or events in more than one story, the teacher begins by making sure that students understand the concept of compare and contrast. Some students may understand best when the teacher starts by having them compare two classmates, two family members, or home and school settings. Students may do this in a variety of ways such as verbally, with a communication system, or picture choices. The teacher assists the students to place their comparisons on a compare/contrast graphic organizer. Once the teacher is confident that the students understand the concept, the students compare and contrast characters, settings, or events from two different stories. The students may complete the task verbally, using a communication system, picture choices, or working with a partner.

Teachers often pair reading and writing together. The teacher reviews the students' c o m p a r i s o n of characters from two similar books. The teacher directs students to write a short story that has characters from each book meet and tell what the characters would say to each other. The teacher reviews how to punctuate dialogue by showing it in one of the stories the class read. Some students may dictate their story to the teacher and show the teacher where to put quotation marks to indicate dialogue. For some students, the teacher provides more





context (e.g., the characters want the same book in the library) and sentences to choose from to create the dialogue. Some students may select from sentences written on peel-off strips. Some students may use eye-gaze to select the sentences, and some students may use a software program in which they can click and drag the sentence choices to create the dialogue.

ELA Sample Instructional Activities (text complexity increases in each grade)

5th Grade

- Learning the meaning of new words and multiple meaning words (e.g., mold), from reading fifth grade stories or informational texts
- Identifying the theme and finding details and examples to understand important ideas in stories or informational texts and that support inferences and conclusions
- Comparing and contrasting characters, setting, events in a story
- Comparing and contrasting information in two texts (e.g., two articles about turtles)
- Summarizing a story or informational text including the important ideas and details
- Understanding how authors use their point of view to describe things and to provide evidence to support the point of view
- Understanding and using information presented visually, orally or in charts, graphs, diagrams, timelines, etc.
- Sharing ideas and information by producing opinion pieces using words to link reasons to the opinion, informational pieces using multiple sources of information, and stories using dialogue between characters
- Communicating with classmates in discussions and making presentations

- Learning the meaning of multiple meaning words (e.g., tackle) and figurative language (busy as a bee) from reading 6th grade stories or informational texts
- Using details from a story or informational text to explain what the text clearly states or implies
- Comparing the big idea(s) and information of two stories (e.g., both themes are "making friends takes work.")
- Summarizing a story or informational text without including any personal opinions
- Understanding how an author's point of view affects how the reader understands a story and how an author uses evidence to try to convince the reader of a claim in an informational text
- Sharing ideas and information by producing persuasive pieces that include reasons and evidence, informational pieces using a conclusion that summarizes the information, and stories that use words and phrases to signal time (e.g., yesterday)
- Communicating with classmates in discussions, understanding other's views





In grade 5, the focus in mathematics is on learning about numbers including place value and decimals, solving problems using addition, subtraction, multiplication, and division, determining the properties of two- and three-dimensional shapes and calculating volume, and getting information from different types of graphs. All of these learning activities that you can expect your child to be involved in might be individualized for your child. This allows the skills to be taught, practiced, and learned so that your child can make progress more easily. Here is a mathematics example that shows how individualization might work.

The teacher teaches place value by assigning students to groups of four to play a place value game. The students have templates where they can record their games. The template has a decimal and three spaces to the right of the decimal representing tenths, hundredths, and thousandths. The first student decides what place value the next student will work on: some students may say the place value, some students may point to a space, and some students may use a voice output device to make their selection. The next student rolls a numbered cube: some students may roll the numbered cube and some students may use a cube rolling application on the computer. The student counts the number rolled on the cube and puts that number in the correct place value space: some students may write the numeral, some students may say the number and a friend may write it for them, some students may make tally marks, and some students may place the correct number of bingo chips in the space.





5th Grade

- Determining place value to the thousandths, using decimals to the thousandths
- Writing numerical expressions involving only whole numbers and one or more operational symbols
- Using addition, subtraction, multiplication, and division to solve problems
- Adding, subtracting, multiplying, and dividing fractions
- Solve 1-step problems using decimals
- Identifying properties of shapes (e.g., parallel perpendicular lines)
- Graphing points on grids and finding points on x- and y- axes; comparing information in graphs
- Calculating volume of 3-dimensional rectangular shapes; converting measurements (e.g., 3 feet = 1 yard)
- Making and describing number patterns
- Determining if multiplying by a number will increase or decrease the answer
- Organizing and describing data and data patterns using bar graphs, picture graphs, and line plots

6th Grade Preview

- Using number lines to locate and compare positive and negative numbers
- Locating positive and negative numbers on a coordinate grid
- Solving word problems by adding, subtracting, multiplying, and dividing numbers up to three digits
- Solving word problems with fractions and decimals
- Writing and solving expressions and equations with variables and parentheses; writing and solving expressions with exponents; solving linear equations
- Understanding unit rate (e.g., 4 tickets cost \$20, so each ticket costs \$5)
- Calculating areas of four-sided shapes and triangles; making decisions about when to use formulas for perimeter, area, and volume
- Planning for, collecting, and organizing data on line plots, graphs, histograms, and dot plots
- Describing data using mean, median, range and spread

Mathematics Sample Instructional Activities





In middle school, your child's instruction has an increased focus on informational texts, but still includes enjoying reading or listening to and learning more about literary (non-fiction) texts. Your child will:

- read/listen to stories (e.g., Roll of Thunder, Hear My Cry) and informational texts (e.g., science, geography, history, technical) that may be adapted,
- produce different types of writing: stories, informational, and persuasive, and
- learn communication skills (e.g., class discussions and presentations).

The complexity of the stories and informational text your child will read or listen to will increase throughout the year and as he/she moves to the next grade. The following are a few ways that

RANGE OF TEXT COMPLEXITY

- Text is short with many pictures.
- Sentences are simple and include repeated ideas.
- Text has events in order with ideas clearly stated.
- Charts and diagrams are simple.
- Text includes every day, common words.



- Text is detailed with few pictures.
- Sentences are compound and complex
- Text has implied ideas and connections among a range of ideas.
- Charts and diagrams include detailed information
- Text includes expressions and phrases.

stories and text become more complex.

Instructional activities should be individualized for your child as needed. For example, to teach summarizing an informational text without including opinions, the teacher has students read an informational text that includes personal opinion by the author. The teacher has the students identify and mark out the sentences that are the author's personal opinion (e.g., it was the best city for pizza). For some students, the teacher reads the text aloud and has the students point to the personal opinion sentences. For other students, the teacher provides a few sentences from the text, reads each, and asks if it is the author's opinion or a fact. Some students may use a "yes/no" switch to answer the questions. The teacher then has the students read and summarize a short informational article using the following steps: 1) identify the main idea in the first sentence, 2) write the information from the article to understand the main idea in 20 words or less, 3) write a concluding sentence. Some students may use text to speech to read the article and may copy and paste information from the article to create their summary. Some students may dictate their summary.

Teachers often pair reading and writing together. The teacher has the students write about what it is like to live where they live in the U.S. (e.g., city, small town, etc.) to share with class pen pals from another country. The teacher has students use a writing planning sheet using the





same steps as used for summarizing (see above). The teacher has students use their completed planning sheets to write the letter adding details to build understanding. Some students may use a word prediction program, some students may complete sentences using a writing software that includes pictures with the words/phrases, and some students may dictate their letter. Some students may choose from provided sentences using eye-gaze to create their letter.

ELA Sample Instructional Activities (text complexity increases in each grade)

6th Grade

- Learning the meaning of multiple meaning words (e.g., tackle) and figurative language (busy as a bee) from reading 6th grade stories or informational texts
- Using details from a story or informational text to explain what the text clearly states or implies
- Comparing the big idea(s) and information of two stories (e.g., both themes are "making friends takes work.")
- Summarizing a story or informational text without including any personal opinions
- Understanding how an author's point of view affects how the reader understands a story and how an author uses evidence to try to convince the reader of a claim in an informational text
- Sharing ideas and information by producing persuasive pieces that include reasons and evidence, informational pieces using a conclusion that summarizes the information, and stories that use words and phrases to signal time (e.g., yesterday)
- Communicating with classmates in discussions, understanding other's views

- Learning the meaning of new words, and how they affect 7 grade level stories or informational texts
- Determining the big idea or central meaning of stories and informational text
- Understanding how characters, individuals, settings, ideas, and events affect each other (e.g., character's choices might be different in the city than the country)
- Comparing texts in two different books or mediums (e.g., book and a video) to see how the information is presented
- Finding evidence in an informational text to support the claim the author is trying to convince the reader
- Sharing ideas and information by producing persuasive pieces that include claims, relevant ideas and evidence, informational pieces using a conclusion that summarizes the information, and stories with sequenced events and details to show experiences
- Communicating with classmates in discussions; changing own views when appropriate
- Reporting on a topic using multimedia (e.g., slide show) and using relevant information to support main ideas





In grade 6, the focus in mathematics is on solving word problems with larger numbers, decimals, and fractions, learning about positive and negative numbers, studying perimeter, area, and volume of shapes, and getting detailed information from different types of graphs. All of these learning activities that you can expect your child to be involved in might be individualized for your child. This allows the skills to be taught, practiced, and learned so that your child can make progress more easily. Here is a mathematics example that shows how individualization might work.

The teacher has been teaching about unit rate. The students practice working with unit rate (e.g., 4 tickets cost \$20, so each ticket costs \$5). Students work on several real-world problems about shopping, preparing recipes, travel time, earnings, and others. Students do not have to work on every problem but can choose those that are interesting to them. Students are allowed to use multiple ways to calculate solutions to the problems. Some students may calculate using mental math, some students may use paper and pencil, some students may use calculators, some students may use number lines, and some students may use counters.





6th Grade

- Using number lines to locate and compare positive and negative numbers
- Locating positive and negative numbers on a coordinate grid
- Solving word problems by adding, subtracting, multiplying, and dividing numbers up to three digits
- Solving word problems with fractions and decimals
- Writing and solving expressions and equations with variables and parentheses; writing and solving expressions with exponents; solving linear equations
- Understanding unit rate (e.g., 4 tickets cost \$20, so each ticket costs \$5)
- Calculating areas of four-sided shapes and triangles; making decisions about when to use formulas for perimeter, area, and volume
- Planning for, collecting, and organizing data on line plots, graphs, histograms, and dot plots
- Describing data using mean, median, range and spread

7th Grade Preview

- Multiplying and dividing positive and negative numbers
- Creating and solving equations about realworld problems
- Using ratios and proportions on grids or line graphs to show proportional relationships
- Solving percent problems and word problems that have a combination of whole numbers, fractions, and decimals
- Using formulas to solve area, surface area, and volume problems; solving problems about the area and circumference of circles
- Connecting proportionality to geometry to show effect of scale change on distance, area, and volume
- Solving equations and expressions that are not equal about real-world problems
- Collecting and analyzing data; identifying range, median, mean and mode; comparing data
- Determining probability based on data

Mathematics Sample Instructional Activities





In middle school, your child's instruction has an increased focus on informational texts, but still includes enjoying reading or listening to and learning more about literary (non-fiction) texts read aloud. Your child will:

- read/listen to stories, poetry (e.g., The Road Not Taken), plays and informational texts (e.g., biographies, historical documents, science texts, etc.) that may be adapted,
- produce different types of writing: stories, informational, and persuasive, and
- learn communication skills (e.g., classroom discussions and presentations).

The complexity of the stories and informational text your child will read or listen to will increase

RANGE OF TEXT COMPLEXITY

- Text is short with many pictures.
- Sentences are simple and include repeated ideas.
- Text has events in order with ideas clearly stated.
- Charts and diagrams are simple.
- Text includes every day, common words



- Text is detailed with few pictures.
- Sentences are compound and complex.
- Text has implied ideas and connections among a range of ideas.
- Charts and diagrams include detailed information
- Text includes expressions and phrases.

throughout the year and as he/she moves to the next grade. The following are a few ways that stories and text become more complex.

Instructional activities should be individualized for your child as needed. For example, to teach how to compare the written and movie versions of a play the teacher introduces segments of each. The teacher has the students complete a Reading and Viewing Guide on which the students record information about the setting, characters, plot, events, and resolution of the written version of the play and of the movie. The teacher may provide options on sticky notes for some students to place on the guide, ask some students a series of questions (e.g., is the character scared in the play), or have some students dictate their responses.

Teachers often pair reading and writing together. After completing several more instructional activities to help students analyze the written and movie versions of the play, the teacher provides students with two options for a writing project. In the first option, students create a movie poster using information from the written play and a brief summary to entice people to see the movie. In the second option, students use images and information from the movie to create a book jacket that will entice people to read the play. The movie poster and the book jacket should include information about what is included in one version and not the other. The teacher provides an adapted/alternative keyboard for some students to use to create the poster or book jacket on the computer. For some students, the teacher provides a gallery of





pictures to use when creating the poster or book jacket. Some students may record themselves and a partner discussing the written and movie versions.

ELA Sample Instructional Activities (text complexity increases in each grade)

7th Grade

- Learning the meaning of new words, and how they affect 7th grade level stories or informational texts
- Determining the big idea or central meaning of stories and informational text
- Understanding how characters, individuals, settings, ideas, and events affect each other (e.g., character's choices might be different in the city than the country)
- Comparing texts in two different books or mediums (e.g., book and a video) to see how the information is presented
- Finding evidence in an informational text to support the claim the author is trying to convince the reader
- Sharing ideas and information by producing persuasive pieces that include claims, relevant ideas and evidence, informational pieces using a conclusion that summarizes the information, and stories with sequenced events and details to show experiences
- Communicating with classmates in discussions; changing own views when appropriate
- Reporting on a topic using multimedia (e.g., slide show) and using relevant information to support main ideas

- Learning the meaning of new academic and content words (e.g., galaxy), and how they affect 8th grade level stories or informational texts
- Understanding how the big idea or central idea of stories and informational text are developed by finding evidence throughout
- Comparing two or more texts to see how the characters' points of view are similar or different and how they affect the story
- Analyzing two or more informational texts that provide conflicting information on the same topic
- Determining the author's claim and evaluating the evidence used to support the claim
- Determining how a text is structured (e.g., cause/effect, chronological order)
- Sharing ideas and information by producing persuasive pieces that include clear reasons, ideas, and evidence; informational pieces using content specific vocabulary; and stories that use language such as imagery (e.g., juicy and sweet) that build understanding and appreciation
- Communicating claims and information to classmates





In grade 7, the focus in mathematics is on creating and solving equations about real-world problems, solving problems using positive and negative numbers, studying area, surface area, and volume of shapes, making scale drawings, and comparing data from different types of graphs, and determining probability based upon data. All of these learning activities that you can expect your child to be involved in might be individualized for your child. This allows the skills to be taught, practiced, and learned so that your child can make progress more easily. Here is a mathematics example that shows how individualization might work.

The teacher is teaching how to determine the probability of different events based upon data. Students use a color wheel game spinner to create data. Students work in pairs to take turns spinning the spinner and recording their results. Then they answer a question based upon their data (e.g., If you spin a spinner with four colors, what is the chance it will land on green on the next trial?). Some students may choose a color wheel game spinner with only red, green, and blue, making it easier for students who are learning to identify colors. Each student records what color the spinner lands on. Some students may record results by putting tally marks next to the written color name; some students may put cubes of the same color into boxes of the same color. At the end of the trials, some students may count the tally marks and the other students may use a golf counter to record the number of cubes in each box. Students order the colors from the one with the largest number of "hits" to the one with the smallest number of "hits" so they can use that information to determine the probability of an event occurring (e.g., On the next spin what is the chance the spinner will land on green?).

Mathematics Sample Instructional Activities

7th Grade

- Multiplying and dividing positive and negative numbers
- Creating and solving equations about realworld problems
- Using ratios and proportions on grids or line graphs to show proportional relationships
- Solving percent problems and word problems that have a combination of whole numbers, fractions, and decimals
- Using formulas to solve area, surface area, and volume problems; solving problems about the area and circumference of circles
- Connecting proportionality to geometry to show effect of scale change on distance, area, and volume
- Solving equations and expressions that are not equal about real-world problems
- Collecting and analyzing data; identifying range, median, mean and mode; comparing data
- Determining probability based on data

- Working with rational and irrational numbers
- Adding, subtracting, multiplying, and dividing fractions, decimals, or positive/negative numbers
- Recognizing and comparing congruent and similar figures; describing scale change on surface area, area, and volume
- Changing a 2-dimensional shape using turns, flips, or slides
- Learning about how angles are related to each other (e.g., supplementary, complementary, and adjacent)
- Solving problems involving angle measure, area, surface area, and volume including cylinders, cubes, and spheres
- Solving linear equations; graphing linear functions
- Interpreting information from graphs and plots
- Conduct and analyze probability experiments





In middle school, your child's instruction has an increased focus on informational texts, but still includes enjoying reading or listening to and learning more about literary (non-fiction) texts. Your child will:

- read/listen to stories, plays (e.g., *The Crucible*), poems and informational texts (e.g., biographies, memoirs, historical documents, technical documents, etc.) that may be adapted,
- produce different types of writing: stories, informational, and persuasive, and
- learn communication skills (e.g., classroom discussions and presentations).

The complexity of the stories and informational text your child will read or listen to will increase throughout the year and as he/she moves to the next grade. The following are a few ways that

RANGE OF TEXT COMPLEXITY

- Text is short with many pictures.
- Sentences are simple and include repeated ideas.
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- Charts and diagrams are simple.
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- Text is detailed with few pictures.
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- Text includes expressions and phrases.

stories and text become more complex.

Instructional activities should be individualized for your child as needed. For example, to teach how to determine what the author is claiming and the evidence the author uses to support the claim, the teacher reads a persuasive article (e.g., Driving Age Should Be Lowered). The teacher projects a chart on the board that has three sections: author's claim, evidence, and page number. The teacher has the class complete the chart through a class discussion to determine the author's claim and evidence used to support the claim. Some students provide a response by pointing to the evidence in the text. Some students will choose from provided options. The teacher has students independently complete their own chart using a different article. Some students may listen to a recording of the article; some students may read an adapted version of the article (e.g., two short sentences on each page paired with a picture). Some students may dictate their responses for the chart. Some students may copy from the text.

Teachers often pair reading and writing together. The teacher points to words in the article that the students just read that indicate evidence (e.g., for example, because) and has students brainstorm a list of similar words. The teacher directs the students to choose from a list of topics to write a persuasive article. The teacher provides a graphic organizer and reminds





ELA Sample Instructional Activities (text complexity increases in each grade)

8th Grade

- Learning the meaning of new academic and content words (e.g., galaxy), and how they affect 8th grade level stories or informational texts
- Understanding how the big idea or central idea of stories and informational text are developed by finding evidence throughout
- Comparing two or more texts to see how the characters' points of view are similar or different and how they affect the story
- Analyzing two or more informational texts that provide conflicting information on the same topic
- Determining the author's claim and evaluating the evidence used to support the claim
- Determining how a text is structured (e.g., cause/effect, chronological order)
- Sharing ideas and information by producing persuasive pieces that include clear reasons, ideas, and evidence; informational pieces using content specific vocabulary; and stories that use language such as imagery (e.g., juicy and sweet) that build understanding and appreciation
- Communicating claims and information to classmates

- Learning the meaning of new academic and content words and why an author uses certain words in high school level texts
- Finding what the two or more big ideas or central ideas of stories are and how they are developed
- Deciding how the author's choice in developing story elements (e.g., characters, details, ideas, events, etc.) affects a text
- Evaluating multiple sources of information to answer a question or solve a problem
- Understanding how the author's use of details and how the author structured parts of the text help the reader gain the meaning
- Identifying the author's point of view or claim and deciding whether the reasoning is correct and the evidence is sufficient
- Sharing ideas and information by producing persuasive pieces that include an appropriate organization of the information, relevant facts, details, and examples; and use appropriate vocabulary and phrases for the type of writing (e.g., imagery for narrative writing)
- Communicating decisions, goals, and action plans





In grade 8, the focus in mathematics is on creating and solving equations about real-world problems, solving problems using positive and negative numbers, studying how changing positions and size affects geometric figures; determining how one angle in a geometric figure affects other angles; calculating volume of three dimensional objects; using data from different types of graphs; and determining probability. All of these learning activities that you can expect your child to be involved in might be individualized for your child. This allows the skills to be taught, practiced, and learned so that your child can make progress more easily. Here is a mathematics example that shows how individualization might work.

The teacher is beginning to teach congruency and similarity of geometric figures. Students will be practicing on worksheets the teacher has given them. Some students may work on three transformations (e.g., turns, flips, slides), some students may work on two transformations, and some students may work on one. Some students may have to complete transformations and some students may have to identify what transformation has been completed for them. Some students may have to come up with an answer on their own and some students may choose from several answer choices (some students may choose from four answer choices, some students may choose from three answer choices, and some students may choose from two answer choices).

Mathematics Sample Instructional Activities

8th Grade

- Working with rational and irrational numbers
- Adding, subtracting, multiplying, and dividing fractions, decimals, or positive/negative numbers
- Recognizing and comparing congruent and similar figures; describing scale change on surface area, area, and volume
- Changing a 2-dimensional shape using turns, flips, or slides
- Learning about how angles are related to each other (e.g., supplementary, complementary, and adjacent)
- Solving problems involving angle measure, area, surface area, and volume including cylinders, cubes, and spheres
- Solving linear equations; graphing linear functions
- Interpreting information from graphs and plots
- Conduct and analyze probability experiments

- Learning about exponents and scientific notation
- Solving problems with rational and irrational numbers
- Using tools to make geometric constructions
- Solving real world geometric problems by using transformations and finding dimensions of figures
- Graphing and using linear equations to solve geometric problems
- Writing and solving variable expressions that represent word problems
- Identifying, completing, predicting, comparing, and making conclusions from data displayed in graphs and box plots
- Calculate the mean and median of a set of data
- Describing, predicting, and making conclusions about real-world probabilities





In high school, your child's instruction has a strong focus on informational texts, but still includes enjoying reading or listening to and learning more about literary (non-fiction) texts read aloud. Your child will:

- read/listen to stories (e.g., Jane Eyre), plays, poems and informational texts (e.g., biographies, political and economic documents, historical documents, etc.) that may be adapted,
- produce different types of writing: stories, informational, and persuasive, and
- learn communication skills (e.g., class discussions and presentations).

The complexity of the stories and informational text your child will read or listen to will increase throughout the year and as he/she moves to the next grade. The following are a few ways that stories and text become more complex.

RANGE OF TEXT COMPLEXITY

- Text is short with many pictures.
- Sentences are simple and include repeated ideas.
- Text has events in order with ideas clearly stated.
- Charts and diagrams are simple.
- Text includes every day, common words.



- Text is detailed with few pictures.
- Sentences are compound and complex.
- Text has implied ideas and connections among a range of ideas.
 - Charts and diagrams include detailed information.
- Text includes expressions and phrases.

Mathematics – Grade 11

In grade 11, the focus in mathematics is on solving problems using rational and irrational numbers, studying geometry by making accurate geometric drawings and shapes, solving problems using the Pythagorean Theorem, transformations, and linear equations; determining how one angle in a geometric figure affects other angles; calculating volume of cones, cylinders, and spheres; using data from dot plots, histograms, box plots, or scatter plots; and making observations and decision about real-world probabilities. All learning activities that y o u r child is involved in might be individualized for your child. This allows the skills to be taught, practiced, and learned so that your child can make progress more easily. Here is a mathematics example that shows how individualization might work.





A teacher is teaching how to make conclusions about data. The teacher gives students graphs and plots of several real-world scenarios, such as the hourly wages of employees at a home improvement center. Students sort the graphs and plots into which kind of data analysis they feel gives the best way to make a conclusion about the data and give reasons why. Some students may be given graphs and plots of three kinds of data analysis and some students may work with two kinds of data analysis. Some students may write or keyboard their reasons and some students may choose their reasons from pre-written sticky notes.